

Appendix 10

Wilderness and Undeveloped Lands Report

Inventory of Potential Wilderness Areas and Identification of Other Undeveloped Lands

Background

This document describes the process and rationale used to inventory for and identify potential wilderness areas within the Granite Creek Watershed Mining Project, Whitman Ranger District, Wallowa-Whitman National Forest and the North Fork John Day Ranger District, Umatilla National Forest. The inventory is based on, and consistent with criteria found at Forest Service Handbook (FSH) 1909.12 Ch. 71.

Each step of the inventory process is visually documented as a map (see map discussion below). These maps are displayed in this appendix. The Forest Service used professional judgment and local knowledge regarding unique, site-specific conditions of each area being considered for placement in the inventory of potential wilderness areas.

Potential Wilderness Areas (PWA): Areas of potential wilderness identified using inventory procedures found in Forest Service Handbook (FSH) 1909.12 Chapter 71 are called potential wilderness areas. The inventory is conducted with the express purpose of identifying all lands that meet the criteria for being evaluated for wilderness suitability.

Potential wilderness areas are not a land designation decision, they do not imply or impart any particular level of management direction or protection, they are not an evaluation of potential wilderness (FSH 1909.12, Chapter 72), and lastly they are not preliminary administrative recommendations for wilderness designation (FSH 1909.12, Chapter 73). The inventory of potential wilderness does not change the administrative boundary of any inventoried roadless areas (IRAs), any congressionally established wilderness, or any forest plan management areas.

Typically, PWAs substantially overlap and/or are contiguous with inventoried roadless areas. PWAs may also be contiguous with designated wilderness. Some newly inventoried PWAs may be stand alone areas that were not identified as ‘roadless areas’ in Appendix C of the 1990 Umatilla Forest Plan or Appendix C of the 1990 Wallowa-Whitman Land and Resource Management Plan and ‘inventoried roadless areas’ as identified in a set of maps in the 2001 Roadless Area Conservation Rule (RACR). PWAs overlap inventoried roadless areas only where those acres of land are consistent with the inventory criteria (FSH 1909.12 Chapter 71) and may extend beyond IRA and wilderness boundaries consistent with inventory criteria.

The scope of this potential wilderness analysis inventory includes all acres contained within the Granite Watershed Mining project boundary and lands outside the boundary sufficient to consider the potential wilderness area criteria found at FSH 1909.12 Chapter 71.1.

Methodology:

The inventory process was conducted through a sequence of GIS analyses and application of professional judgment. The judgment applied was situational and instance by instance. Each map (Appendix map 10-1, 10-2, 10-3, 10-4, and 10-5) documents the outcome of the application of specific inventory criteria. Inventory criteria were applied in a different order than appears in Chapter 71 but all criteria were considered and accounted for as described below under the Map 10-1 – 10-5 headings. Map 10-0 is a roadless context map for the analysis area.

Examples of typical situations that required applications of professional judgment included, but are not limited to:

1. placement of PWA boundaries along permanent natural or semi-permanent human-made features such as ridges, streams, topographic breaks, past harvest, or forest roads to facilitate easy on the ground identification.

2. whether to proceed through an isthmus (or pinch point) created between two roads or two harvest areas or place a PWA boundary across the isthmus;
3. whether to locate a PWA boundary around a peninsula or place the boundary through the peninsula.

Table 10-1A is a summary of acres evaluated in the inventory process. Table 10-1B was used to account for and display all polygons as described in Map 10-4. Table 10-1C is a summary of the areas that meet inventory criteria as potential wilderness areas. Table 10-1D is a summary of all inventoried lands in the project area.

Map by Map Description

Table 10-1A: Potential Wilderness Area Inventory Summary

| | Approximate Acres Granite Watershed Mining Project Planning Area |
|--|---|
| Map 10-1; Total Acres Inventoried. Granite Watershed Mining Project Planning area and PWA analysis area). | 94,480 (40,624 Wallowa-Whitman and 49,539 Umatilla) |
| Map 10-2; Acres Removed from inventory due to past harvest. | 23,128 |
| Map 10-3; Acres removed from inventory due to activities related to roads | 30,144* |
| Map 10-4; Resulting lands that remain after past harvest and activities related to roads are removed from inventory. (undeveloped lands) | 28,867** |
| Map 10-5; Acres of Potential Wilderness Areas (PWAs) | 14,096 |
| Acres of undeveloped lands that did not meet PWA inventory criteria at FSH 1909.12 Chapter 71.1 (other undeveloped lands) | 14,771 |
| PWA contiguous with North Fork John Day Wilderness | 14,096 |
| Isolated PWA | 0 |
| Total PWA | 14,096 |

* Some of these acres may overlap with acres of past harvest.

** This number does not include polygons less than one acre in size.

The largest single PWA in this analysis is the Twin Mountain IRA at 2,930 acres followed by the Greenhorn Mountain IRA at 2,488 acres. There are numerous smaller PWAs contiguous with the North Fork Wilderness totaling about 1,151 acres and one isolated PWA at 1,087 acres for a total of 15,403 acres of PWA within the PWA analysis area.

Map 10-1 (Analysis Area)

Map 10-1 displays the Granite Watershed Mining project planning area and PWA analysis area, forest roads, the North Fork Wilderness, Greenhorn Mountain and Twin Mountain inventoried roadless areas (IRAs). The project planning area for Granite Watershed Mining is approximately 94,480 acres (40,624 Wallowa-Whitman, and 49,539 Umatilla).

Map 10-2 (Past Harvest)

Map 10-2 displays Granite Watershed Mining project planning area and PWA analysis area, forest roads, past harvest, North Fork John Day Wilderness and Greenhorn Mountain and Twin Mountain IRAs. The PWA analysis area was overlain with Umatilla and the Wallowa-Whitman National Forest's GIS harvest layer which displays locations of timber harvest over the past 50 years. Past timber harvest included clear-cuts to thinning units. In all cases, past timber harvest resulted in features such as stumps, skid trails etc. which are evident; therefore, all acres (approximately 23,128 acres total harvest) depicted on the map do not meet FSH 1909.12 Ch 71.11(9) inventory criteria and were removed from the inventory in Map 10-3.

Map 10-3 (Roads)

Map 10-3 displays Granite Watershed Mining project planning area and PWA analysis area, forest roads, acres with evidence of recognizable stumps, skid trails, uneven canopy closure, North Fork John Day Wilderness and Greenhorn Mountain and Twin Mountain IRAs. The entire analysis area was overlain with forest's GIS forest roads layer. Forest roads have associated permitted uses and maintenance. Road maintenance and many permitted uses have removed trees and created visible stumps in the corridor. These activities are expected to continue into the future.

During initial road construction trees were felled within a clearing limit to provide for safe and efficient construction and future operational safety of road users. Clearing distances away from the edge of a road varied by many factors including tree height, topographic slope, and other factors. Past clearing of trees along forest roads created stumps that are evident and recognizable.

Road maintenance occurs to varying degrees along each road according to an assigned maintenance level and available funding. Road maintenance includes the periodic clearing of brush and the falling of danger trees that present a hazard to forest visitors, employees, and contractors as defined by the Region 6 Danger Tree Policy (2008). The distance of the hazard removal away from a road varies by tree height, topographic slope, and other factors. Past removal of danger trees along forest roads created stumps that are evident and recognizable.

Harvest of trees for personal-use firewood is permitted within 300 feet of open forest roads consistent with project NEPA decisions and travel and access management plan decisions. Past firewood gathering along open forest roads created stumps that are evident and recognizable.

We recognize stumps are not present along every mile of forest road; for example roads adjacent to a meadow, talus, or a lake. The judgment we applied in setting a PWA boundary balanced inventory criteria regarding excluding past harvest and facilitating easy on-the-ground identification.

Based on local knowledge, and professional judgment regarding the evidence of recognizable stumps, skid trails, etc. which occur to varying degrees adjacent to forest roads (as described above) and to facilitate easy on-the-ground identification of a uniform, measurable boundary along a semi-permanent, human-made feature; the boundary was set as 300 feet each side of the forest road.

This boundary is fully consistent with and supported by the following inventory criteria.

- FSH 1909.12 at 71.1(3); potential wilderness areas do not contain forest roads therefore all acres that are a forest road will be removed from the inventory in Map 10-4.
- FSH 1909.12 at 71.1(9); acres with evidence of past logging and roads will be removed from the inventory in Map 10-4.
- FSH 1909.12, at 71; locate potential wilderness area boundaries at semi-permanent, human-made features to facilitate easy on-the-ground identification of a boundary.

Therefore, highlighted acres along forest roads (approximately 30,144 acres) in Map 10-3 were removed from the inventory in Map 10-4. Note some of the highlighted acres overlap with acres removed due to past harvest activities.

Map 10-4 ((Acres not containing Past Timber Harvest or Forest Roads)

Map 10-4 displays Granite Watershed Mining project planning area and PWA analysis area, forest roads, acres that do not contain evidence of past harvest or forest roads (undeveloped lands) including Greenhorn Mountain and Twin Mountain IRAs. Approximately 643 individual polygons of undeveloped lands were evaluated in the PWA analysis area. 279 individual polygons less than 1 acre in size (totaling 64 acres) were eliminated from further study. The removal of these polygons resulted in 364 individual polygons, ranging in size from 1 acre to approximately 3,650 acres, covering approximately 23,800 acres.

Map 10-4 displays the remaining 364 polygons of undeveloped lands, each with its own unique, numeric identifier. These polygons do not have substantially recognizable stumps, do not contain forest roads, and each polygon boundary is greater than or equal to 300 feet from a forest road.

Map 10-5 (Potential Wilderness Areas and Other Undeveloped Lands)

Map 10-5 displays the North Fork John Day Wilderness, Greenhorn Mountain and Twin Mountain IRAs, and Forest Service's completed inventory of PWAs within Granite Watershed Mining project planning area and PWA analysis area.

The acres of the Greenhorn Mountain and Twin Mountain IRAs and each of the other undeveloped polygons in Map 10-4 were considered individually and compared to inventory criteria found at FSH 1909.12 at 71.1 (1, 2a, 2b, 2c). This process and the results are documented in Table 10-1B below and displayed in Map 10-5. Acres of any polygon need only meet one of the four found at FSH 1909.12 71.1 criteria 1, 2a, 2b, or 2c to be retained and displayed on Map 10-5 as PWA.

Of the 364 polygons (23,800 acres) evaluated in the PWA analysis area, 331 polygons, totaling 14,771 acres, are not contiguous with wilderness, primitive areas, Administration-endorsed wilderness, or potential wilderness in other Federal ownership due to the presence of forest roads and/or past timber harvest activity. Based on local knowledge, each of these individual polygons is a part of a larger ecosystem and not a separate, self-contained ecosystem, such as found on an island surrounded by water. These polygons cannot be separately preserved due to physical terrain or a natural condition in part because of their small size and in part because they are each part of the larger, continuous ecosystem distributed throughout the project area. Based on the discussion above, local knowledge and professional judgment, none of these individual polygons met inventory criteria, and therefore were removed from the inventory.

Approximately 14,096 acres are contiguous with the North Fork John Day wilderness area. These

polygon acres generally met criteria 71.1 (2c).

The Greenhorn Mountain IRA and Twin Mountain IRA were examined with the same techniques as each of the other individual polygons.

Not all of the Twin Mountain IRA acres located within the project planning area meet potential wilderness criteria. The entire Greenhorn Mountain IRA inside and the project area, meet potential wilderness criteria. Regardless of the outcome, this inventory does not change the administrative boundary for either IRA, which was established in the Roadless Area Conservation Rule (2001). Both IRAs/PWAs are displayed on map 10-5.

Table 10-1B: Granite Watershed Mining Potential Wilderness Inventory

The following inventory for the Granite Watershed Mining project planning area was created using the inventory criteria found in Forest Service Handbook (FSH) 1909.12 Chapter 71.1. Each polygon and IRA from Map 10-4 (described above) were examined against the following criteria from FSH 1909.12 Chapter 71.1:

(1) Area is more than 5,000 acres in size

(2) Area contains less than 5,000 acres, but can meet one or more of the following criteria:

2a. Area can be preserved due to physical terrain and natural conditions.

2b. Areas are self-contained ecosystems, such as an island, that can be effectively managed as a separate unit of the National Wilderness Preservation System.

2c. Areas are contiguous to existing wilderness, primitive areas, Administration-endorsed wilderness, or potential wilderness in other Federal ownership, regardless of their size.

The Forest Service relied on local knowledge and judgment regarding unique, site specific conditions of each area being considered for placement on the inventory of potential wilderness. Delineation of areas for potential wilderness inventory; locate boundaries at prominent natural or semi-permanent human-made features to facilitate easy on-the-ground identification.

Granite Watershed PWA Inventory – Polygons 1 acre or larger

| Polygon ID | Acres | Meets one or more Criteria | FSH1909.12 71.1(1) is area greater than 5000 acres in size? | FSH1909.12 71.1(2a) Can be preserved due to terrain? | FSH1909.12 71.1(2b) Is it a self contained ecosystem? | FSH1909.12 71.1(2c) Is area contiguous? |
|-------------------|--------------|-----------------------------------|--|---|--|--|
| 5 | 13.98 | N | N | N | N | N |
| 6 | 62.58 | N | N | N | N | N |
| 10 | 4.73 | N | N | N | N | N |
| 12 | 1.15 | N | N | N | N | N |
| 20 | 67.04 | N | N | N | N | N |
| 21 | 4.37 | N | N | N | N | N |
| 23 | 40.04 | N | N | N | N | N |
| 27 | 25.53 | N | N | N | N | N |

| Polygon ID | Acres | Meets one or more Criteria | FSH1909.12 71.1(1) is area greater than 5000 acres in size? | FSH1909.12 71.1(2a) Can be preserved due to terrain? | FSH1909.12 71.1(2b) Is it a self contained ecosystem? | FSH1909.12 71.1(2c) Is area contiguous? |
|-------------------|--------------|-----------------------------------|--|---|--|--|
| 28 | 354.36 | Y | N | N | N | Y |
| 29 | 2.51 | N | N | N | N | N |
| 30 | 1.02 | N | N | N | N | N |
| 31 | 71.00 | N | N | N | N | N |
| 33 | 4.82 | N | N | N | N | N |
| 34 | 2.56 | Y | N | N | N | Y |
| 36 | 1.63 | N | N | N | N | N |
| 37 | 44.45 | N | N | N | N | N |
| 38 | 6.61 | N | N | N | N | N |
| 39 | 13.81 | N | N | N | N | N |
| 40 | 7.20 | N | N | N | N | N |
| 41 | 19.00 | N | N | N | N | N |
| 45 | 34.58 | N | N | N | N | N |
| 46 | 100.06 | N | N | N | N | N |
| 48 | 46.71 | N | N | N | N | N |
| 49 | 1.01 | N | N | N | N | N |
| 50 | 9.75 | N | N | N | N | N |
| 51 | 7.69 | N | N | N | N | N |
| 52 | 10.57 | Y | N | N | N | Y |
| 53 | 125.27 | N | N | N | N | N |
| 56 | 115.67 | N | N | N | N | N |
| 60 | 1.19 | N | N | N | N | N |
| 62 | 5.59 | N | N | N | N | N |
| 70 | 1.18 | N | N | N | N | N |
| 73 | 3.31 | N | N | N | N | N |
| 75 | 12.05 | N | N | N | N | N |
| 77 | 1.10 | Y | N | N | N | Y |
| 80 | 1.86 | N | N | N | N | N |
| 84 | 28.92 | N | N | N | N | N |
| 85 | 2.13 | N | N | N | N | N |

| Polygon ID | Acres | Meets one or more Criteria | FSH1909.12 71.1(1) is area greater than 5000 acres in size? | FSH1909.12 71.1(2a) Can be preserved due to terrain? | FSH1909.12 71.1(2b) Is it a self contained ecosystem? | FSH1909.12 71.1(2c) Is area contiguous? |
|-------------------|--------------|-----------------------------------|--|---|--|--|
| 86 | 15.28 | N | N | N | N | N |
| 87 | 130.19 | N | N | N | N | N |
| 89 | 11.74 | N | N | N | N | N |
| 90 | 1.54 | Y | N | N | N | Y |
| 92 | 14.28 | N | N | N | N | N |
| 94 | 6.07 | N | N | N | N | N |
| 95 | 1.08 | Y | N | N | N | Y |
| 96 | 2.27 | N | N | N | N | N |
| 99 | 1.46 | N | N | N | N | N |
| 102 | 12.11 | N | N | N | N | N |
| 106 | 5.25 | N | N | N | N | N |
| 108 | 9.63 | N | N | N | N | N |
| 110 | 1.26 | N | N | N | N | N |
| 111 | 12.90 | N | N | N | N | N |
| 114 | 3.28 | N | N | N | N | N |
| 115 | 21.21 | N | N | N | N | N |
| 117 | 5.64 | N | N | N | N | N |
| 120 | 27.88 | N | N | N | N | N |
| 121 | 52.68 | N | N | N | N | N |
| 124 | 4.49 | N | N | N | N | N |
| 126 | 8.78 | N | N | N | N | N |
| 127 | 2.83 | N | N | N | N | N |
| 128 | 1.15 | N | N | N | N | N |
| 129 | 2.82 | N | N | N | N | N |
| 130 | 70.29 | N | N | N | N | N |
| 131 | 1.45 | Y | N | N | N | Y |
| 132 | 2.11 | N | N | N | N | N |
| 134 | 1.68 | N | N | N | N | N |
| 135 | 13.06 | N | N | N | N | N |
| 137 | 10.55 | N | N | N | N | N |

| Polygon ID | Acres | Meets one or more Criteria | FSH1909.12 71.1(1) is area greater than 5000 acres in size? | FSH1909.12 71.1(2a) Can be preserved due to terrain? | FSH1909.12 71.1(2b) Is it a self contained ecosystem? | FSH1909.12 71.1(2c) Is area contiguous? |
|-------------------|--------------|-----------------------------------|--|---|--|--|
| 139 | 16.69 | N | N | N | N | N |
| 140 | 7.27 | N | N | N | N | N |
| 141 | 5.39 | N | N | N | N | N |
| 142 | 2.92 | N | N | N | N | N |
| 145 | 126.47 | N | N | N | N | N |
| 147 | 2.80 | N | N | N | N | N |
| 148 | 505.94 | N | N | N | N | N |
| 150 | 32.86 | N | N | N | N | N |
| 151 | 95.85 | N | N | N | N | N |
| 152 | 21.55 | N | N | N | N | N |
| 154 | 11.10 | N | N | N | N | N |
| 156 | 3.08 | N | N | N | N | N |
| 157 | 585.44 | N | N | N | N | N |
| 158 | 18.26 | N | N | N | N | N |
| 160 | 19.83 | N | N | N | N | N |
| 162 | 116.42 | N | N | N | N | N |
| 163 | 3.82 | N | N | N | N | N |
| 165 | 18.60 | N | N | N | N | N |
| 166 | 1.80 | N | N | N | N | N |
| 167 | 4.88 | N | N | N | N | N |
| 168 | 3.53 | N | N | N | N | N |
| 171 | 2.49 | N | N | N | N | N |
| 172 | 29.49 | N | N | N | N | N |
| 173 | 3.16 | N | N | N | N | N |
| 174 | 60.50 | N | N | N | N | N |
| 175 | 17.63 | N | N | N | N | N |
| 176 | 19.96 | N | N | N | N | N |
| 178 | 1.41 | N | N | N | N | N |
| 179 | 19.59 | N | N | N | N | N |
| 180 | 37.48 | N | N | N | N | N |

| Polygon ID | Acres | Meets one or more Criteria | FSH1909.12 71.1(1) is area greater than 5000 acres in size? | FSH1909.12 71.1(2a) Can be preserved due to terrain? | FSH1909.12 71.1(2b) Is it a self contained ecosystem? | FSH1909.12 71.1(2c) Is area contiguous? |
|-------------------|--------------|-----------------------------------|--|---|--|--|
| 181 | 16.44 | N | N | N | N | N |
| 184 | 11.71 | N | N | N | N | N |
| 185 | 13.70 | N | N | N | N | N |
| 186 | 6.61 | N | N | N | N | N |
| 188 | 36.38 | N | N | N | N | N |
| 189 | 1.41 | N | N | N | N | N |
| 190 | 10.37 | N | N | N | N | N |
| 192 | 5.97 | N | N | N | N | N |
| 197 | 12.37 | N | N | N | N | N |
| 198 | 24.06 | N | N | N | N | N |
| 199 | 3.07 | N | N | N | N | N |
| 200 | 14.39 | N | N | N | N | N |
| 201 | 36.71 | N | N | N | N | N |
| 202 | 3.08 | N | N | N | N | N |
| 208 | 34.30 | N | N | N | N | N |
| 211 | 2.97 | N | N | N | N | N |
| 216 | 3.19 | N | N | N | N | N |
| 217 | 112.17 | N | N | N | N | N |
| 218 | 1.45 | N | N | N | N | N |
| 220 | 2.63 | N | N | N | N | N |
| 223 | 42.91 | N | N | N | N | N |
| 225 | 1.88 | N | N | N | N | N |
| 227 | 3.79 | N | N | N | N | N |
| 228 | 32.67 | N | N | N | N | N |
| 229 | 1.64 | N | N | N | N | N |
| 230 | 3.99 | N | N | N | N | N |
| 231 | 41.23 | N | N | N | N | N |
| 233 | 7.57 | N | N | N | N | N |
| 234 | 37.04 | N | N | N | N | N |
| 235 | 10.16 | N | N | N | N | N |

| Polygon ID | Acres | Meets one or more Criteria | FSH1909.12 71.1(1) is area greater than 5000 acres in size? | FSH1909.12 71.1(2a) Can be preserved due to terrain? | FSH1909.12 71.1(2b) Is it a self contained ecosystem? | FSH1909.12 71.1(2c) Is area contiguous? |
|-------------------|--------------|-----------------------------------|--|---|--|--|
| 236 | 98.81 | N | N | N | N | N |
| 241 | 37.74 | N | N | N | N | N |
| 242 | 1.32 | N | N | N | N | N |
| 245 | 10.04 | N | N | N | N | N |
| 247 | 1.77 | N | N | N | N | N |
| 251 | 2.30 | N | N | N | N | N |
| 252 | 4.39 | N | N | N | N | N |
| 253 | 1.07 | N | N | N | N | N |
| 254 | 9.56 | N | N | N | N | N |
| 255 | 1.12 | N | N | N | N | N |
| 257 | 25.60 | N | N | N | N | N |
| 259 | 7.06 | Y | N | N | N | Y |
| 260 | 11.74 | N | N | N | N | N |
| 261 | 7.83 | N | N | N | N | N |
| 262 | 1.82 | N | N | N | N | N |
| 263 | 91.49 | N | N | N | N | N |
| 264 | 7.66 | N | N | N | N | N |
| 265 | 16.39 | N | N | N | N | N |
| 266 | 37.48 | N | N | N | N | N |
| 267 | 1.96 | N | N | N | N | N |
| 270 | 3.20 | N | N | N | N | N |
| 271 | 515.07 | N | N | N | N | N |
| 272 | 1.01 | N | N | N | N | N |
| 275 | 12.29 | N | N | N | N | N |
| 276 | 3.76 | N | N | N | N | N |
| 277 | 302.14 | N | N | N | N | N |
| 278 | 1.02 | N | N | N | N | N |
| 279 | 16.50 | N | N | N | N | N |
| 287 | 11.18 | N | N | N | N | N |
| 288 | 23.04 | N | N | N | N | N |

| Polygon ID | Acres | Meets one or more Criteria | FSH1909.12 71.1(1) is area greater than 5000 acres in size? | FSH1909.12 71.1(2a) Can be preserved due to terrain? | FSH1909.12 71.1(2b) Is it a self contained ecosystem? | FSH1909.12 71.1(2c) Is area contiguous? |
|-------------------|--------------|-----------------------------------|--|---|--|--|
| 289 | 4.17 | N | N | N | N | N |
| 291 | 4.78 | N | N | N | N | N |
| 294 | 3.26 | N | N | N | N | N |
| 295 | 3.50 | N | N | N | N | N |
| 298 | 2.86 | N | N | N | N | N |
| 299 | 2.02 | N | N | N | N | N |
| 300 | 3.87 | N | N | N | N | N |
| 301 | 13.45 | N | N | N | N | N |
| 302 | 1.87 | N | N | N | N | N |
| 304 | 1074.04 | N | N | N | N | N |
| 306 | 6.89 | N | N | N | N | N |
| 311 | 28.44 | N | N | N | N | N |
| 313 | 2.89 | N | N | N | N | N |
| 315 | 176.70 | N | N | N | N | N |
| 317 | 2.40 | N | N | N | N | N |
| 318 | 10.51 | N | N | N | N | N |
| 319 | 1.83 | N | N | N | N | N |
| 321 | 5.64 | N | N | N | N | N |
| 322 | 74.76 | N | N | N | N | N |
| 325 | 3.46 | N | N | N | N | N |
| 326 | 174.81 | N | N | N | N | N |
| 327 | 3.66 | N | N | N | N | N |
| 328 | 4.36 | N | N | N | N | N |
| 329 | 5.68 | N | N | N | N | N |
| 330 | 2.05 | N | N | N | N | N |
| 331 | 2.36 | N | N | N | N | N |
| 332 | 3.77 | Y | N | N | N | Y |
| 333 | 1231.45 | Y | N | N | N | Y |
| 335 | 6.35 | Y | N | N | N | Y |
| 337 | 1.01 | Y | N | N | N | Y |

| Polygon ID | Acres | Meets one or more Criteria | FSH1909.12 71.1(1) is area greater than 5000 acres in size? | FSH1909.12 71.1(2a) Can be preserved due to terrain? | FSH1909.12 71.1(2b) Is it a self contained ecosystem? | FSH1909.12 71.1(2c) Is area contiguous? |
|-------------------|--------------|-----------------------------------|--|---|--|--|
| 338 | 3.88 | Y | N | N | N | Y |
| 340 | 8.74 | N | N | N | N | N |
| 342 | 1474.41 | Y | N | N | N | Y |
| 344 | 6.05 | N | N | N | N | N |
| 345 | 1.15 | N | N | N | N | N |
| 346 | 3.26 | N | N | N | N | N |
| 347 | 101.78 | N | N | N | N | N |
| 350 | 6.40 | N | N | N | N | N |
| 351 | 2.54 | N | N | N | N | N |
| 352 | 31.44 | N | N | N | N | N |
| 353 | 2.78 | N | N | N | N | N |
| 354 | 5.27 | N | N | N | N | N |
| 356 | 124.92 | N | N | N | N | N |
| 357 | 990.50 | N | N | N | N | N |
| 358 | 5.64 | N | N | N | N | N |
| 361 | 1.82 | N | N | N | N | N |
| 362 | 2.54 | N | N | N | N | N |
| 363 | 12.87 | N | N | N | N | N |
| 364 | 25.10 | N | N | N | N | N |
| 365 | 10.92 | N | N | N | N | N |
| 366 | 18.65 | N | N | N | N | N |
| 368 | 76.97 | N | N | N | N | N |
| 369 | 2.16 | N | N | N | N | N |
| 371 | 10.93 | N | N | N | N | N |
| 373 | 2.07 | N | N | N | N | N |
| 374 | 2.62 | N | N | N | N | N |
| 376 | 15.32 | N | N | N | N | N |
| 377 | 8.80 | N | N | N | N | N |
| 378 | 169.95 | N | N | N | N | N |
| 383 | 6.86 | N | N | N | N | N |

| Polygon ID | Acres | Meets one or more Criteria | FSH1909.12 71.1(1) is area greater than 5000 acres in size? | FSH1909.12 71.1(2a) Can be preserved due to terrain? | FSH1909.12 71.1(2b) Is it a self contained ecosystem? | FSH1909.12 71.1(2c) Is area contiguous? |
|-------------------|--------------|-----------------------------------|--|---|--|--|
| 386 | 9.94 | N | N | N | N | N |
| 387 | 22.53 | N | N | N | N | N |
| 388 | 18.50 | N | N | N | N | N |
| 389 | 1.13 | N | N | N | N | N |
| 390 | 751.65 | N | N | N | N | N |
| 391 | 25.37 | N | N | N | N | N |
| 394 | 2.90 | N | N | N | N | N |
| 401 | 1.68 | N | N | N | N | N |
| 403 | 1.65 | N | N | N | N | N |
| 406 | 33.56 | N | N | N | N | N |
| 407 | 364.67 | N | N | N | N | N |
| 409 | 2.57 | N | N | N | N | N |
| 411 | 35.07 | N | N | N | N | N |
| 415 | 552.75 | N | N | N | N | N |
| 419 | 1.51 | N | N | N | N | N |
| 422 | 441.39 | N | N | N | N | N |
| 423 | 108.88 | N | N | N | N | N |
| 424 | 3.35 | N | N | N | N | N |
| 425 | 3.76 | N | N | N | N | N |
| 428 | 19.71 | N | N | N | N | N |
| 429 | 269.03 | N | N | N | N | N |
| 431 | 27.40 | N | N | N | N | N |
| 432 | 23.40 | N | N | N | N | N |
| 435 | 25.66 | N | N | N | N | N |
| 438 | 7.69 | N | N | N | N | N |
| 439 | 39.69 | N | N | N | N | N |
| 441 | 2.79 | N | N | N | N | N |
| 445 | 192.98 | N | N | N | N | N |
| 446 | 8.41 | N | N | N | N | N |
| 447 | 2.97 | N | N | N | N | N |

| Polygon ID | Acres | Meets one or more Criteria | FSH1909.12 71.1(1) is area greater than 5000 acres in size? | FSH1909.12 71.1(2a) Can be preserved due to terrain? | FSH1909.12 71.1(2b) Is it a self contained ecosystem? | FSH1909.12 71.1(2c) Is area contiguous? |
|-------------------|--------------|-----------------------------------|--|---|--|--|
| 449 | 2.84 | N | N | N | N | N |
| 451 | 3.25 | N | N | N | N | N |
| 452 | 2.66 | N | N | N | N | N |
| 455 | 146.52 | N | N | N | N | N |
| 456 | 1.29 | N | N | N | N | N |
| 457 | 4.57 | N | N | N | N | N |
| 458 | 5.94 | N | N | N | N | N |
| 459 | 49.34 | N | N | N | N | N |
| 460 | 5.09 | N | N | N | N | N |
| 461 | 3.07 | N | N | N | N | N |
| 467 | 6.20 | N | N | N | N | N |
| 470 | 1.85 | N | N | N | N | N |
| 472 | 1.06 | N | N | N | N | N |
| 473 | 55.99 | N | N | N | N | N |
| 475 | 17.30 | N | N | N | N | N |
| 478 | 316.53 | N | N | N | N | N |
| 479 | 5.48 | N | N | N | N | N |
| 480 | 1.46 | N | N | N | N | N |
| 481 | 3.17 | N | N | N | N | N |
| 482 | 176.05 | N | N | N | N | N |
| 483 | 5.82 | N | N | N | N | N |
| 485 | 35.17 | N | N | N | N | N |
| 489 | 7.94 | N | N | N | N | N |
| 490 | 2.76 | N | N | N | N | N |
| 491 | 20.13 | N | N | N | N | N |
| 492 | 20.70 | N | N | N | N | N |
| 494 | 4.18 | N | N | N | N | N |
| 495 | 5.21 | Y | N | N | N | Y |
| 496 | 9.83 | N | N | N | N | N |
| 501 | 1.30 | N | N | N | N | N |

| Polygon ID | Acres | Meets one or more Criteria | FSH1909.12 71.1(1) is area greater than 5000 acres in size? | FSH1909.12 71.1(2a) Can be preserved due to terrain? | FSH1909.12 71.1(2b) Is it a self contained ecosystem? | FSH1909.12 71.1(2c) Is area contiguous? |
|-------------------|--------------|-----------------------------------|--|---|--|--|
| 502 | 2.07 | N | N | N | N | N |
| 503 | 6.02 | N | N | N | N | N |
| 507 | 8.29 | N | N | N | N | N |
| 508 | 35.30 | N | N | N | N | N |
| 510 | 47.41 | N | N | N | N | N |
| 514 | 796.11 | N | N | N | N | N |
| 515 | 14.20 | N | N | N | N | N |
| 517 | 3628.16 | Y | N | N | N | Y |
| 518 | 3.48 | N | N | N | N | N |
| 520 | 1.01 | N | N | N | N | N |
| 525 | 57.76 | Y | N | N | N | Y |
| 526 | 11.06 | N | N | N | N | N |
| 528 | 1.14 | N | N | N | N | N |
| 531 | 3649.66 | Y | N | N | N | Y |
| 534 | 7.63 | N | N | N | N | N |
| 537 | 7.58 | N | N | N | N | N |
| 538 | 1.64 | N | N | N | N | N |
| 539 | 1.67 | N | N | N | N | N |
| 543 | 3.01 | N | N | N | N | N |
| 544 | 2.35 | N | N | N | N | N |
| 545 | 46.54 | N | N | N | N | N |
| 546 | 1.17 | Y | N | N | N | Y |
| 547 | 1.31 | N | N | N | N | N |
| 548 | 8.08 | N | N | N | N | N |
| 550 | 1.08 | N | N | N | N | N |
| 557 | 122.62 | Y | N | N | N | Y |
| 561 | 8.01 | N | N | N | N | N |
| 563 | 34.81 | N | N | N | N | N |
| 564 | 1.54 | N | N | N | N | N |
| 569 | 3.80 | Y | N | N | N | Y |

| Polygon ID | Acres | Meets one or more Criteria | FSH1909.12 71.1(1) is area greater than 5000 acres in size? | FSH1909.12 71.1(2a) Can be preserved due to terrain? | FSH1909.12 71.1(2b) Is it a self contained ecosystem? | FSH1909.12 71.1(2c) Is area contiguous? |
|-------------------|--------------|-----------------------------------|--|---|--|--|
| 571 | 1.56 | N | N | N | N | N |
| 574 | 2.15 | Y | N | N | N | Y |
| 575 | 66.88 | N | N | N | N | N |
| 577 | 1.83 | N | N | N | N | N |
| 578 | 16.35 | N | N | N | N | N |
| 583 | 56.38 | N | N | N | N | N |
| 584 | 22.99 | N | N | N | N | N |
| 585 | 3.73 | N | N | N | N | N |
| 586 | 11.88 | Y | N | N | N | Y |
| 587 | 2.71 | N | N | N | N | N |
| 589 | 6.27 | N | N | N | N | N |
| 592 | 786.17 | N | N | N | N | N |
| 594 | 3.62 | N | N | N | N | N |
| 595 | 1.37 | N | N | N | N | N |
| 598 | 1.10 | Y | N | N | N | Y |
| 599 | 75.07 | Y | N | N | N | Y |
| 602 | 11.63 | N | N | N | N | N |
| 604 | 8.93 | N | N | N | N | N |
| 605 | 10.80 | N | N | N | N | N |
| 609 | 57.30 | Y | N | N | N | Y |
| 612 | 2.45 | N | N | N | N | N |
| 613 | 435.65 | Y | N | N | N | Y |
| 614 | 4.46 | N | N | N | N | N |
| 615 | 36.36 | N | N | N | N | N |
| 616 | 234.13 | N | N | N | N | N |
| 617 | 3.51 | Y | N | N | N | Y |
| 619 | 108.63 | N | N | N | N | N |
| 620 | 7.23 | N | N | N | N | N |
| 621 | 1.74 | N | N | N | N | N |
| 622 | 51.63 | N | N | N | N | N |

| Polygon ID | Acres | Meets one or more Criteria | FSH1909.12 71.1(1) is area greater than 5000 acres in size? | FSH1909.12 71.1(2a) Can be preserved due to terrain? | FSH1909.12 71.1(2b) Is it a self contained ecosystem? | FSH1909.12 71.1(2c) Is area contiguous? |
|------------|---------|----------------------------|---|--|---|---|
| 623 | 33.24 | N | N | N | N | N |
| 624 | 7.60 | N | N | N | N | N |
| 625 | 1.95 | N | N | N | N | N |
| 626 | 401.67 | Y | N | N | N | Y |
| 627 | 1.88 | N | N | N | N | N |
| 629 | 6.34 | N | N | N | N | N |
| 630 | 11.70 | N | N | N | N | N |
| 634 | 93.01 | Y | N | N | N | Y |
| 635 | 12.76 | N | N | N | N | N |
| 636 | 17.68 | N | N | N | N | N |
| 637 | 8.21 | N | N | N | N | N |
| 638 | 1.33 | N | N | N | N | N |
| 639 | 30.35 | N | N | N | N | N |
| 641 | 131.37 | Y | N | N | N | Y |
| 642 | 42.13 | Y | N | N | N | Y |
| 643 | 9.41 | N | N | N | N | N |
| 650 | 2271.89 | Y | N | N | N | Y |

Inventory Results

In summary the following areas meet inventory criteria as potential wilderness areas and are displayed in Map 10-5.

Table 10-1C; Final Inventory of Potential Wilderness Areas for the Granite Watershed Mining Project

| Potential Wilderness Area Identifier (Polygon ID) | Planning Project Area Acreage (rounded) |
|---|---|
| Greenhorn Mountain | 2,489 |
| Twin Mountain | 2,930 |
| PWA contiguous with North John Day Wilderness* | 14,096 |
| Total PWA | 14,096** |

* This number of acres includes the two IRAs

** This number does not include polygons less than one acre in size.

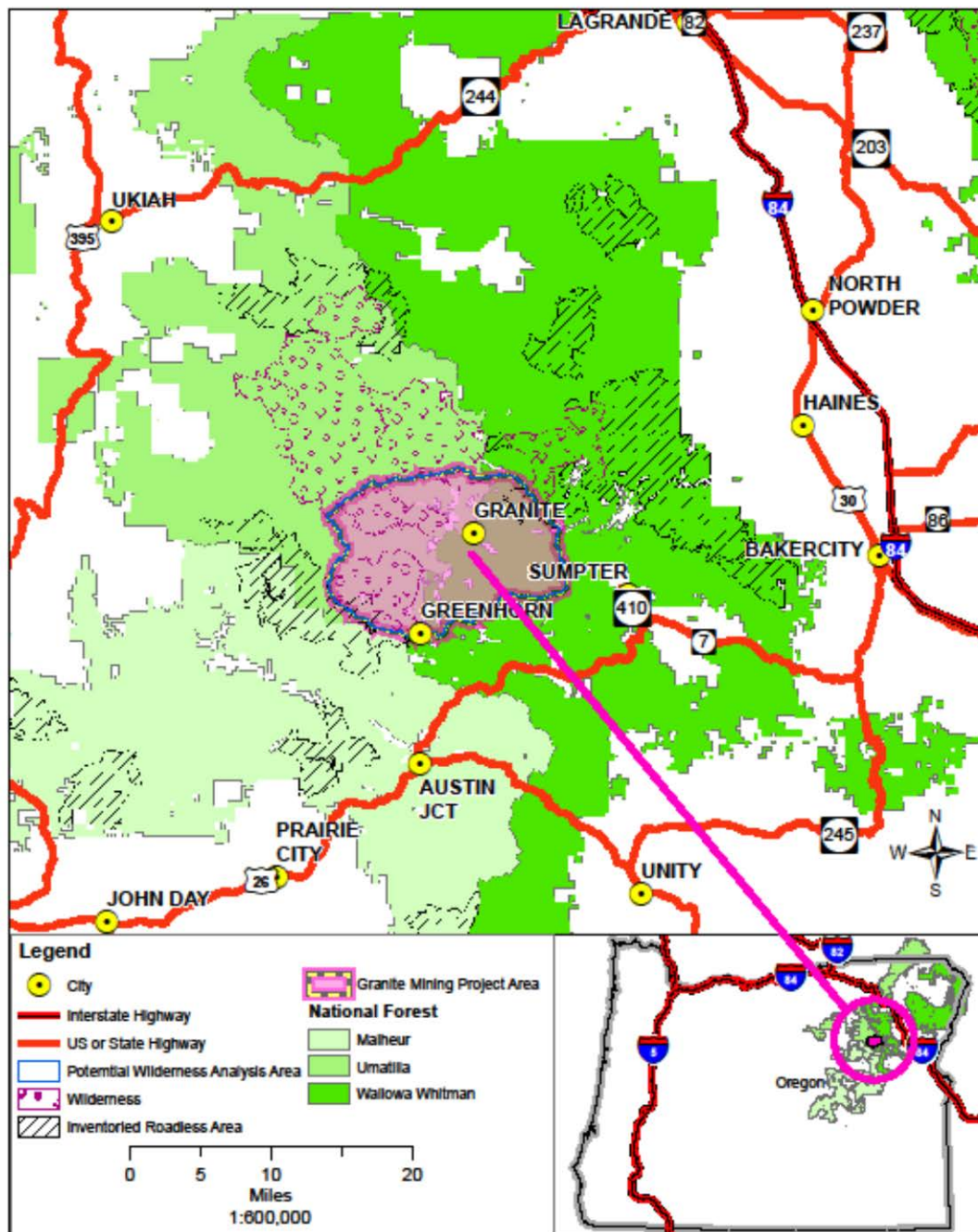
Table 10-1D; Summary of inventoried lands for the Granite Watershed Mining Project

| | NF North Fork John Day Wilderness | PWA contiguous with NF John Day Wilderness | Isolated PWA polygons | Other Undeveloped Lands | Developed Lands (evidence of past harvest and/or roads) | Total (Acres) |
|-----------------------------|--|--|-----------------------------|-------------------------------|---|----------------------|
| Project Planning Area | 25,217 | 14,096 | 0 | 14,771 | 53,272 | 107,356 |
| PWA Analysis Area | 0 | 14,096 | 0 | 14,771 | 53,272 | 82,139 |

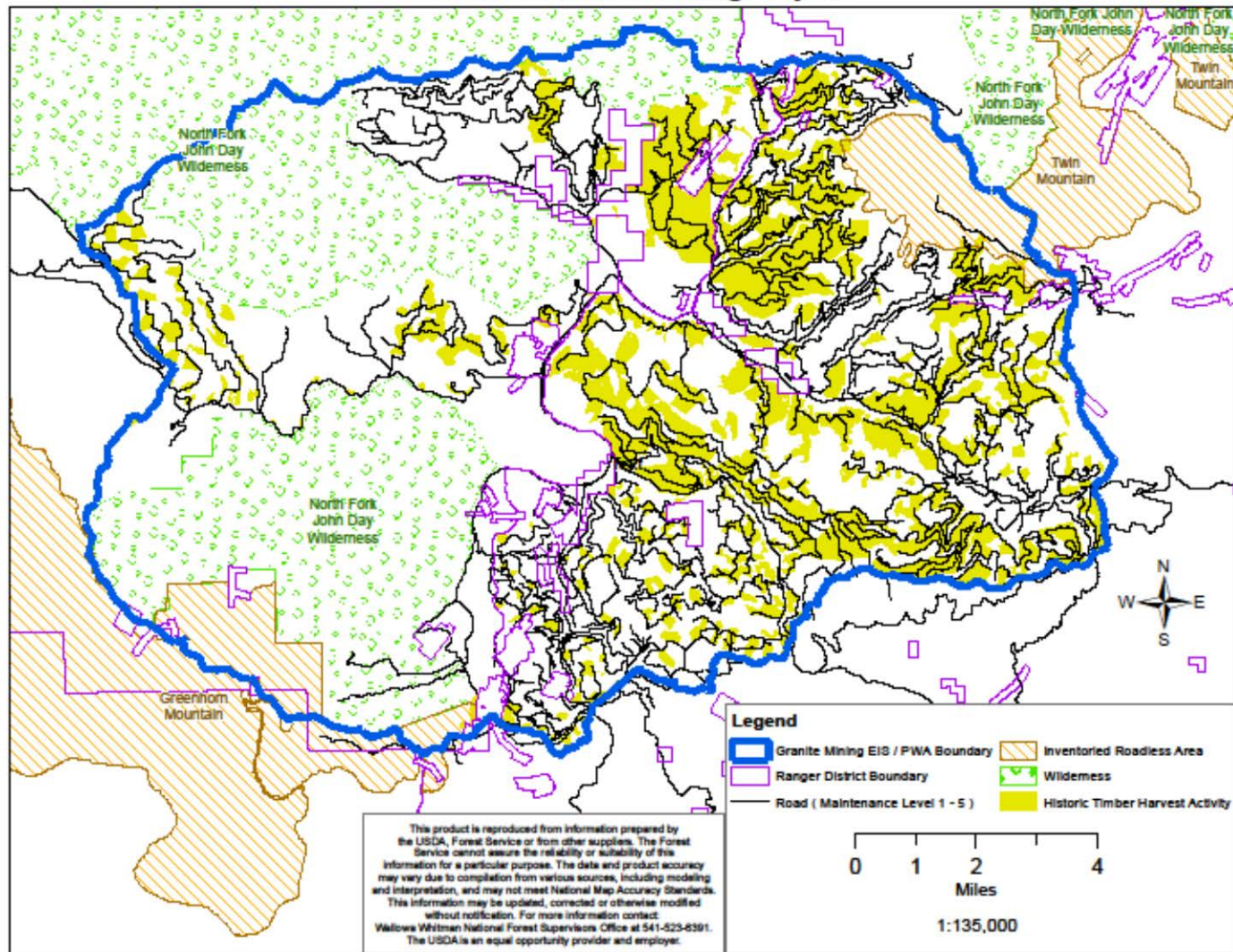
Attached Maps and Documents

- a. Map 10-1 – Granite Watershed Mining Project Undeveloped Inventory Analysis Areas
- b. Map 10-2 – Inventory of Past Harvest
- c. Map 10-3 – Inventory of Roads
- d. Map 10-4 – Inventory of undeveloped lands
- e. Map 10-5 – Inventory of Potential Wilderness Areas (PWAs)

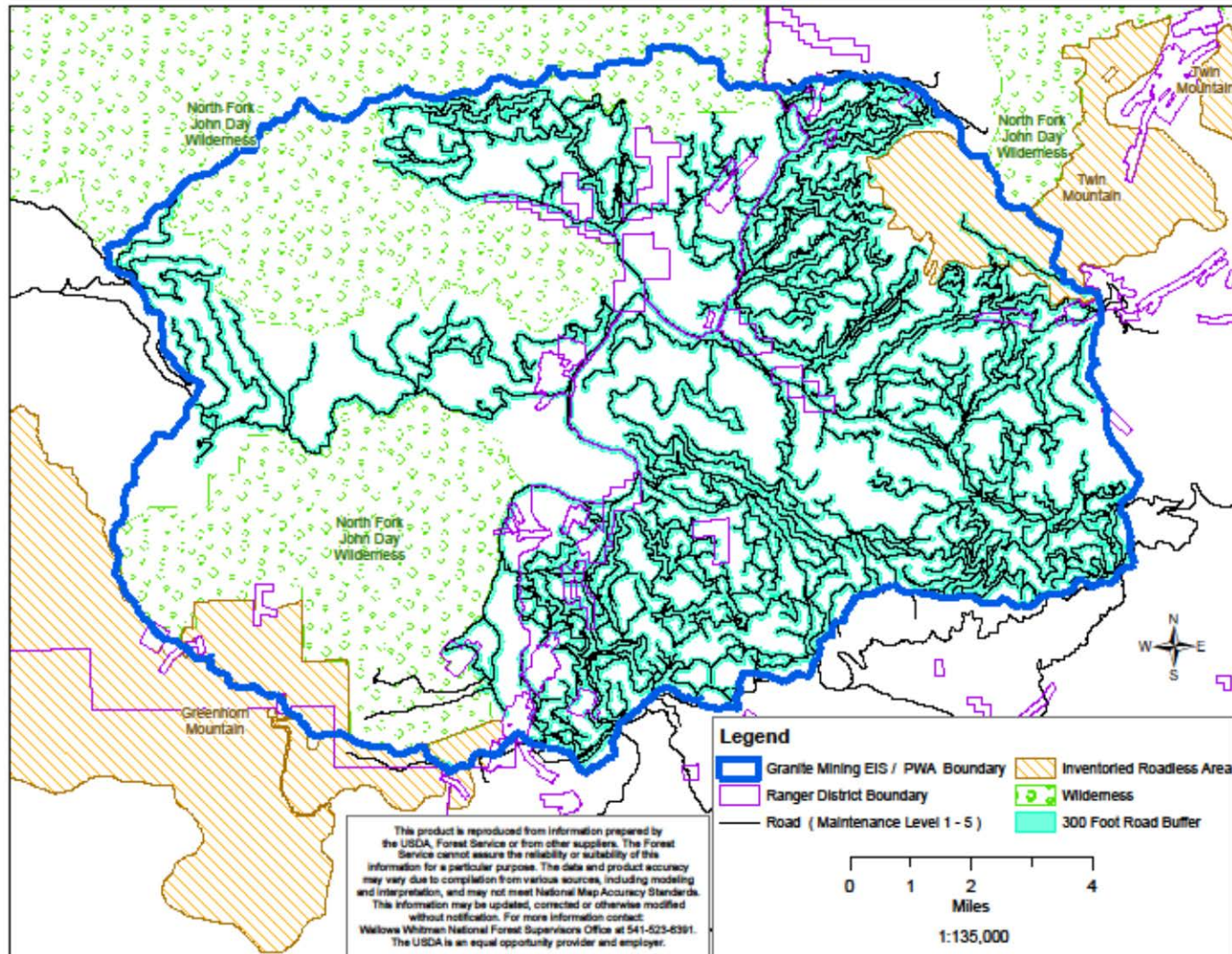
**Map 10-1 Undeveloped Inventory Analysis Areas
Granite Watershed Mining Project**



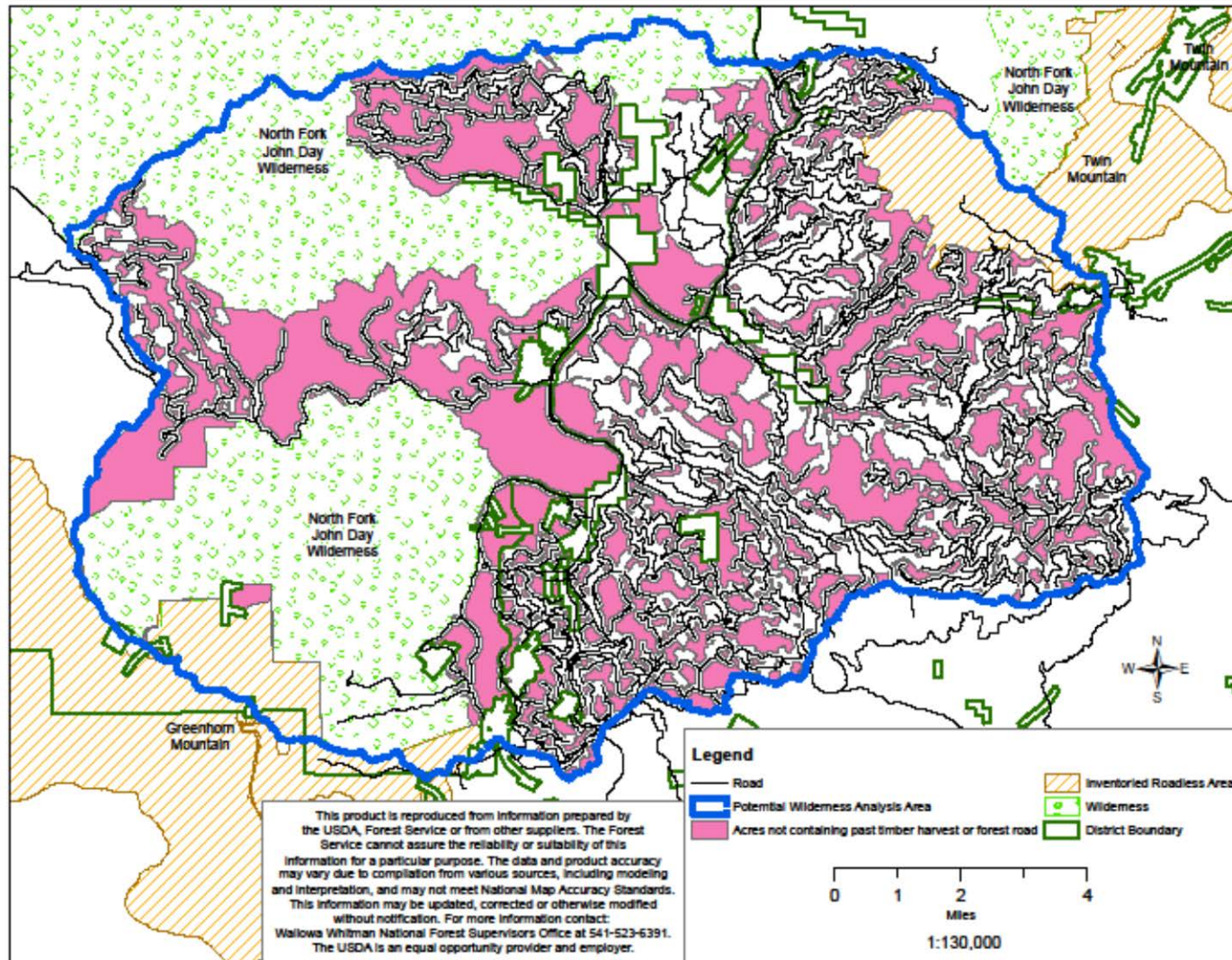
**Map 10-2 Inventory of Past Harvest
Granite Watershed Mining Project**



Map 10-3 Inventory of Roads
Granite Watershed Mining Project



**Map 10-4 Inventory of Undeveloped Lands
Granite Watershed Mining Project**



**Map 10-5 Inventory of Potential Wilderness Areas (PWAs)
Granite Watershed Mining Project**

